

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

Rec'd PCT/PTO

15 JUN 2005

(43) International Publication Date
8 July 2004 (08.07.2004)

PCT

(10) International Publication Number
WO 2004/056927 A2(51) International Patent Classification⁷: C09C 1/00(21) International Application Number:
PCT/EP2003/013534

(22) International Filing Date: 2 December 2003 (02.12.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
102 60 718.4 23 December 2002 (23.12.2002) DE(71) Applicant (for all designated States except US): DE-
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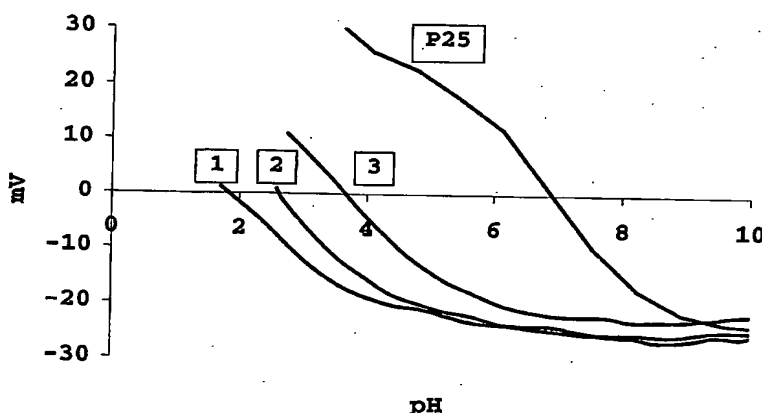
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(DE).(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,
MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT,
RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.(84) Designated States (regional): European patent (AT, BE,
BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU,
IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).

Declarations under Rule 4.17:

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(54) Title: TITANIUM DIOXIDE COATED WITH SILICON DIOXIDE



(57) Abstract: Powder consisting of particles with a core of titanium dioxide and a coating of silicon dioxide, which powder has a content of silicon dioxide of between 0.5 and 40 wt.%, a BET surface of between 5 and 300 m²/g, and which consists of primary particles that have a coating of silicon dioxide and a core of titanium dioxide. The powder is produced according to a process in which a vaporisable silicon compound and a vaporisable titanium compound are mixed corresponding to the subsequently desired ratio of SiO₂ and TiO₂ in the product, are vaporised at temperatures of 200°C or less, and conveyed by means of an inert gas stream together with hydrogen and air or with oxygen-enriched air to the central pipe (core) of a known burner, the reaction mixture is ignited at the mouth of the burner and introduced together with secondary air, is combusted in a cooled flame pipe, following which the titanium dioxide powder coated with silicon dioxide is separated from the gaseous reaction products and if necessary is freed in moist air from adhering hydrogen chloride, the ratio of primary air to secondary air being greater than 0.3, the ratio of core hydrogen to secondary air being greater than 1, and the ratio of titanium dioxide precursor to secondary air being greater than 0.5. Sunscreen agent containing the powder in an amount of between 0.01 and 25 wt.%.



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